

Notice of Allowability

Application No.

09/668,296

Examiner

C. Michelle Tarae

Applicant(s)

HIRAHARA ET AL.

Art Unit

3623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to communication received on September 10, 2004.
2. ☒ The allowed claim(s) is/are 37,39,40 and 42-45.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☒ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


TARIQ R. HAFIZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600

ALLOWANCE

1. The following is an Examiner's statement of reasons for allowance in response to the communication received on September 10, 2004. Claims 27-36, 38 and 41 have been canceled. Claims 37, 39, 40, 42 and 43 have been amended. Claim 45 has been newly added. Claims 37, 39, 40 and 42-45 are now pending in this application.

Priority

2. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Japan on September 24, 1999. It is noted, however, that applicant has not filed a certified copy of the P11-271441 application as required by 35 U.S.C. 119(b).

Reasons for Allowance

3. Claims 37, 39, 40 and 42-45 are allowed.

4. The following is an Examiner's statement of reasons for allowance: None of the prior art of record, taken individually or in any combination, teach, a visiting plan generation system comprising: a plan generating means for generating a visiting plan of a group at a predetermined point of time, based on information including locations of destinations, and conditions of tasks to be performed as information on said destinations, and information of said group constructed by a plurality of members including a mobile capacity (speed of movement) and a working capability defined by time required for the tasks of said members necessary for visiting plan generation; a

Art Unit: 3623

destination assignment means for assigning a destination to the group and the members of the group when the plan generating means generates the visiting plan; a state memory means for memorizing a state X showing said visiting plan generated, the members of said each group and information on destination assignment to each group, and an optimum state in preceding visiting plan conditions; a state re-arrangement means connected with said state memory means for re-arranging the visiting plan to an optimum state by re-arranging the destination to the group and the members of the group based on the state X memorized in said state memory means; a cost calculation means for calculating total time spent in moving and total time spent in working as the visiting plan cost $F_i(X_i)$ of each group, based on information including locations of destinations, and conditions of tasks to be performed as information on said destinations, and information of said group constructed by a plurality of members including a mobile capacity (speed of movement) and a working capability defined by time required for the tasks of said members necessary for visiting plan generation; a plan re-formation means for re-forming a visiting plan X_i for each group based on information including locations of destinations, and conditions of tasks to be performed, information of said group constructed by a plurality of members including a mobile capacity (speed of movement) and a working capability defined by time required for the tasks of said members, and information of visiting plan cost $F_i(X_i)$ of the group, and sending the re-formed visiting plan data to said state re-arrangement means; wherein said state re-arrangement means re-arranges members of the group and visiting plan thereof to an optimum state, using the visiting plan X_i of the group I under the state X

Art Unit: 3623

sent from the plan re-formation means and the visiting plan cost F_i (X_i) thereof, and sending the re-arranged visiting plan data to the state memory means as a visiting plan of the group I to an optimum state.

The prior art most closely resembling Applicant's claimed invention are Edgar et al. (U.S. 5,848,395) and Ralston et al. (U.S. 6,389,454).

Edgar et al. teaches an appointment booking and scheduling system that takes into consideration people visiting customer sites. The system includes using a table for storing routes to the customer sites and for storing jobs to be conducted at each site.

Ralston et al. teaches a multi-facility appointment scheduling system. The system schedules the appointments by comparing client appointment preference data with service constraints.

However, neither Edgar et al. nor Ralston et al. teaches a visiting plan generation system comprising: a plan generating means for generating a visiting plan of a group at a predetermined point of time, based on information including locations of destinations, and conditions of tasks to be performed as information on said destinations, and information of said group constructed by a plurality of members including a mobile capacity (speed of movement) and a working capability defined by time required for the tasks of said members necessary for visiting plan generation; a destination assignment means for assigning a destination to the group and the members of the group when the plan generating means generates the visiting plan; a state memory means for memorizing a state X showing said visiting plan generated, the members of said each

Art Unit: 3623

group and information on destination assignment to each group, and an optimum state in preceding visiting plan conditions; a state re-arrangement means connected with said state memory means for re-arranging the visiting plan to an optimum state by re-arranging the destination to the group and the members of the group based on the state X memorized in said state memory means; a cost calculation means for calculating total time spent in moving and total time spent in working as the visiting plan cost $F_i(X_i)$ of each group, based on information including locations of destinations, and conditions of tasks to be performed as information on said destinations, and information of said group constructed by a plurality of members including a mobile capacity (speed of movement) and a working capability defined by time required for the tasks of said members necessary for visiting plan generation; a plan re-formation means for re-forming a visiting plan X_i for each group based on information including locations of destinations, and conditions of tasks to be performed, information of said group constructed by a plurality of members including a mobile capacity (speed of movement) and a working capability defined by time required for the tasks of said members, and information of visiting plan cost $F_i(X_i)$ of the group, and sending the re-formed visiting plan data to said state re-arrangement means; wherein said state re-arrangement means re-arranges members of the group and visiting plan thereof to an optimum state, using the visiting plan X_i of the group I under the state X sent from the plan re-formation means and the visiting plan cost $F_i(X_i)$ thereof, and sending the re-arranged visiting plan data to the state memory means as a visiting plan of the group I to an optimum state.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Westerlage et al. (U.S. 5,987,377) discusses a method and apparatus for determining expected time of arrival taking into account speed of movement and destination location;
- Westerlage et al. (U.S. 5,724,243) discusses a method and apparatus for determining expected time of arrival;
- Walker et al. (U.S. 5,963,911) discusses a resource allocation system;
- Sisley et al. (U.S. 5,943,652) discusses a resource assignment and scheduling system; and
- Delorme et al. (WO 98/35311) discusses a travel reservation and planning system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to C. Michelle Tarae (formerly, C. Michelle Colon) whose

Art Unit: 3623

telephone number is 571-272-6727. The examiner can normally be reached Monday – Friday from 8:30am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz, can be reached at 571-272-6729.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any response to this action should be mailed to:

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

or faxed to:

703-872-9306 [Official Communications; including After Final
communications labeled "Box AF"]

571-273-6727 [For status inquiries, draft communication, labeled
"Proposed" or "Draft"]

Hand delivered responses should be brought to:

United States Patent and Trademark Office

Art Unit: 3623

Customer Service Window

Randolph Building

401 Dulany Street

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